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Indian Standard
DIMENSIONS FOR
CIRCULAR-HEAD STEEL COWL
VENTILATORS

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DIMENSIONS FOR CIRCULAR-HEAD STEEL COWL VENTILATORS

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Indian Standard

DIMENSIONS FOR CIRCULAR-HEAD STEEL COWL VENTILATORS

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 14 February 1966, after the draft finalized by the Marine Engineering and Shipbuilding Sectional Committee had been approved by the Mechanical Engineering Division Council.

0.2 This standard is one of a series of Indian Standards on cowl ventilators. Other standards in the series are:

IS : 3271-1966 General requirements for steel cowl ventilators with detachable components

IS : 3272-1966 Dimensions for oval-head steel cowl ventilators

IS : 3275-1966 Dimensions for accessories for steel cowl ventilators

IS : 3276-1966 Dimensions for mechanical turning arrangements for steel cowl ventilators

IS : 3277- Dimensions for coamings for steel cowl ventilators
(*under preparation*)

IS : 3278-1966 Dimensions for detachable coaming covers and wire mesh grids for steel cowl ventilators

0.3 In the preparation of this standard, assistance has been derived from NF J 46-110 : 1951 'Manches a air frais—pavillon hémisphérique (Ventilator—circular-head)' issued by the Association Francaise de Normalisation.

0.4 'Indian Standard general requirements for steel cowl ventilators with detachable components' (IS : 3271-1966) is a necessary adjunct to this standard.

0.5 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS : 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

* Rules for rounding off numerical values (*revised*).

1. SCOPE

1.1 This standard gives the dimensions for circular-head steel cowl ventilators, for nominal sizes 150 to 1 600 mm for sea-going vessels.

2. DESCRIPTION

2.1 The construction of the circular-head steel cowl ventilators shall be as shown in Table 1. A beading bar or a half section pipe shall be welded or riveted to the mouth.

3. MATERIAL

3.1 The materials for construction of steel cowl ventilators shall be as given in IS : 3271-1966*.

4. DIMENSIONS AND TOLERANCES

4.1 The dimensions for circular-head steel cowl ventilators shall be as given in Table 1.

4.2 The tolerances shall be as given in IS : 3271-1966*.

5. DESIGNATION

5.1 The circular-head steel cowl ventilators shall be designated by the name, type, the nominal size and number of this standard.

Example :

A circular-head steel cowl ventilator having a nominal size of 300 mm, conforming to this standard shall be designated as :

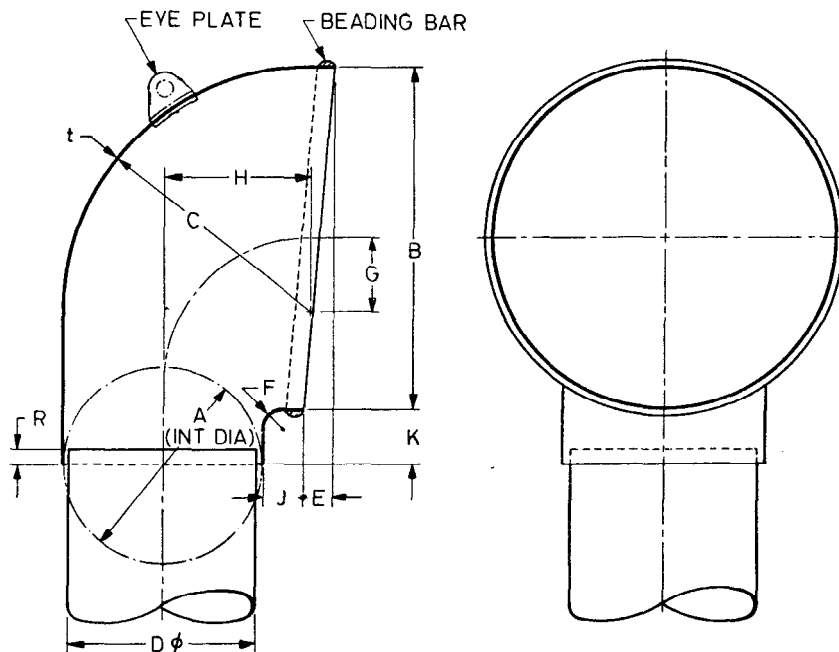
Circular-Head Steel Cowl Ventilator 300 IS : 3273

* General requirements for steel cowl ventilators with detachable components.

TABLE 1 DIMENSIONS FOR CIRCULAR-HEAD STEEL COWL VENTILATORS

(Clauses 2.1 and 4.1)

(All dimensions in millimetres)



NOMINAL SIZE D	A ($D+2t$)	B ($1.75D$)	C ($1.25D$)	E	F ($0.1D$)	G	H	J ($0.2D$)	K	t	BEAD- ING BAR	DIA OF RI- VETS	OVER- LAP R	No. OF RI- VETS
150	153.2	263	188	23	15	56	110	30	50	1.60	18 × 6	6	16	4
200	203.2	350	250	30	20	75	148	40	57	1.60	18 × 6	6	16	4
250	253.2	438	313	33	25	94	186	50	64	1.60	18 × 6	6	16	4
300	303.2	525	375	46	30	113	223	60	75	1.60	18 × 6	6	16	4
350	354.0	613	438	53	35	129	258	70	76	2.00	25 × 6	6	22	4
400	404.0	700	500	61	40	150	298	80	89	2.00	25 × 6	6	22	6
450	454.0	788	563	68	45	170	338	90	102	2.00	25 × 6	6	22	6
500	504.0	875	625	76	50	185	372	100	102	2.00	25 × 6	6	22	6
550	554.0	963	688	83	55	208	411	110	102	2.00	25 × 6	6	22	6
600	604.0	1 050	750	91	60	225	447	120	125	2.00	25 × 6	6	22	6
700	705.0	1 225	875	105	70	263	522	140	150	2.50	30 × 10	8	28	8
800	805.0	1 400	1 000	121	80	300	597	160	180	2.50	30 × 10	8	28	8
900	905.0	1 575	1 125	136	90	335	672	180	180	2.50	30 × 10	8	28	8
1 000	1 006.3	1 750	1 250	151	100	375	747	200	205	3.15	35 × 14	8	28	8
1 100	1 106.3	1 925	1 375	167	110	415	825	220	205	3.15	35 × 14	8	28	8
1 250	1 256.3	2 188	1 563	190	125	463	935	250	205	3.15	35 × 14	8	28	8
1 400	1 406.3	2 450	1 750	212	140	525	1 047	280	250	3.15	35 × 14	8	28	8
1 600	1 606.3	2 800	2 000	242	160	590	1 191	320	250	3.15	35 × 14	8	28	8

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